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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/768,747	01/24/2001	Donald J. Kadyk	13768.141	3863

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EXAMINER
TO, BAOQUOC N

ART UNIT	PAPER NUMBER
2172	

DATE MAILED: 04/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☐ Responsive to communication(s) filed on _____ .

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1-38_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) _1-38_ is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____ .

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .

4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: .

DETAILED ACTION

1.   Claims 1-38 are presented for examination.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

2.   Claim rejected under 35 U.S.C. 103(a) as being unpatentable over Day, III et al.

(US. Patent No. 6,429,849) in view of LaRue (US. Patent No. 6,477,545).

Regarding on claim 1, Day, III teaches in an environment that includes a first

device storing first data and a second device storing second data, a method of

synchronizing the second data with the first data, while accounting for one more update

notifications that either may or may not have been received by the second device and

while accounting for any differences in how the first device and second device data, the

method comprising:

An act making a change in the first data (updating) (col. 7, line 27);

An act of sending a notification (notification) to the second device, the notification

including both the change (updating) (col. 7, line 27) and a token identifying the change

(token) (col. 5, lines 60-62);

An act of receiving a synchronization request from the second device (col. 7,

lines 40-43); and

Day III does not explicitly teach an act of resending the change to the second device if the synchronization request does not include the token. However, LaRue teaches, "if the client determines that not all of the sent set of changes have been confirmed, then an error has occurred, and the client would take appropriate error-handling action, such as aborting the synchronization. If the client has further set(s) of fresh changes to send to the GUD, then it would send them and await confirmation of their receipt in the same manner as shown for the time 5-13. After all fresh changes have been sent, the next phase of the synchronization continues" (col. 12, lines 63-67 and col. 13, lines 1-5). This teaches the claimed of resending the change to the second device. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to combine the teaching of LaRue and Day III because resending the change to the second device would allow the guarantee that the synchronization of data is successful.

Regarding on claim 2, LaRue teaches the act of resending the change to the second device includes the act of resending the token to the second device (col. 12, lines 63-67 and col. 13, lines 1-5).

Regarding on claim 3, LaRue teaches the act of sending a notification is performed over an unreliable communication channel (col. 6, lines 61-65).

Regarding on claim 4, LaRue teaches the unreliable communication channel comprises a wireless communication channel (wireless channel) (col. 5, lines 1-5).

Regarding on claim 5, LaRue teaches the acts of receiving a synchronization request and resending the change are performed over a reliable communication channel (col. 6, lines 65-67).

Regarding on claim 6, LaRue teaches the token is unique to the first device (col. 9, lines 65-67).

Regarding on claim 7, LaRue teaches the act of compressing the token, wherein the compressed token is unique to the second device (col. 10, lines 1-8).

Regarding on claim 8, LaRue teaches the first and second data include at least one of contact data, calendar data, task data, and email data (organizer) (254, fig. 2A).

Regarding on claim 9, LaRue teaches the first device comprises a message server and the second device comprises a message client (col. 5, lines 8-16).

Regarding on claim 10, LaRue teaches the message client comprises one of the

portable personal computer (lab top) (252, fig. 2A), a cellular telephone, a pager, and a

personal digital assistant.

Regarding on claim 11, LaRue teaches the notification corresponds to only a

portion of the change made in the first data, the method further comprising the act of

providing, in response to a request for synchronization that includes the token, any

remaining portion of the change made in the first data (col. 3, lines 29-37).

3.   Claims 12-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over

LaRue (US. Patent No. 6,477,545) in view of Folger et al. (US. Patent No.

5,337,044).

Regarding on claims 12, 26 and 33, LaRue teaches in an electronic messaging

environment that includes a message server and one or more message clients, a

method of synchronization data stored at the one or more message clients with data

stored at the message server, while accounting for one or more update notifications that

either may or may not have been received by the one or more message clients and

while accounting for any differences in how the message server and the one or more

message client store data, the method comprising:

An act of making a plurality of changes in the message server data (col. 8, lines

10-16);

An act of generating a plurality tokens identifying each of the plurality of changes

in the message server data (col. 10, lines 9-16);

An act of sending a plurality of notifications to the one or more message client

over an unreliable communication channel (wireless channel) (col. 5, lines 1-5), each

notification including (i) at least one of the plurality of the changes and (ii) at least one of

the plurality of tokens, the at least one of the plurality of tokens corresponding to the at

least one of the plurality of changes (col. 10, lines 1-5);

An act of receiving a plurality of tokens back from the one or more message

client (col. 6, lines 66-67 and col. 7, lines 1-10); and

An act of resending the one or more missing changes to the one or more

message clients (col. 12, lines 63-67 and col. 13, lines 1-5).

LaRue does not explicitly teach an act of interpreting one or more tokens that

were sent to the one or more message client but not received back from the one or

more message clients as indications that one or more changes are missing from the

one or more message clients. However, Folger teaches, "the communicator 140 can

issue a command to establish communication with the based station 10 and to retrieve

the missed information, update, etc" (col. 12, lines 9-12). This teaches missing updating

information will be retrieved and update by command (token). Therefore, it would have

been obvious to one ordinary skill in the art at the time of the invention was made to

combine the teaching of Folger and LaRue because retrieving the missing updating

information would allow the system to complete the updating process in the event the

sending information is not completed.

Regarding on claims 13, 29 and 35, LaRue teaches the act of resending to the

one or more message clients one or more tokens identifying the one or more missing

changes (col. 12, lines 63-67 and col. 13, lines 1-5).

Regarding on claims 14, 27 and 34, LaRue teaches an act of generating a

collection object (change) that comprises a list of tokens (updating fields of updated

records, some indication of the identities of deleted records, and entire added record),

the list representing a state of the data stored at the one or more message clients; and

an act of sending the collection object to the one or more message clients (col. 10, lines

1-8).

Regarding on claims 15 and 28, LaRue teaches the unreliable communication

channel comprises a wireless communication channel (wireless channel) (col. 5, lines 1-

5).

Regarding on claims 16, 30 and 36, LaRue teaches the act of compressing the

plurality of tokens, wherein the act of compressing the plurality of tokens (sent fresh

changes) produces a plurality tokens that are unique to each of the one or more

message clients (col. 10, lines 1-10).

Regarding on claims 17, 31 and 37, LaRue teaches the data stored at the

message server includes at least one of contact data, calendar data, task data, and

email data and wherein the one or more message clients comprise one of a portable

personal computer, a cellular telephone, a pager, and a personal digital assistant

(organizer) (254, fig. 2A).

Regarding on claims 18, 32 and 38, LaRue teaches at least one change made in the message server data is divided into a first portion and a second portion, and at least one notification corresponds to the first portion, the method further comprising:

An act of receiving back from the one or more message client, a token associated with the first portion (col. 13, lines 23-25); and

An act of sending the second portion to the one or more message clients in response to receiving back the token associated with the first portion (col. 13, lines 33-37).

Regarding on claim 19, LaRue teaches in an electronic messaging environment that includes a message server and one or more message clients, a method for synchronizing data stored at the one or more message client with data stored at the message server, while accounting for one or more update notifications that either may or may not have been received by the one or more message clients and while accounting for any differences in how message server and the one or more message clients store data, the method comprising:

A step of providing, over an unreliable communication channel (wireless) (col. 5, lines 1-5), a plurality of notifications to the one or more message clients, the plurality of notifications including (i) a plurality of changes to the data stored at the message server, and (ii) a plurality of tokens identifying each of the plurality of changes (col. 10, lines 1-5);

A step for providing to the one or more message clients, any change associated with a missing notification identified in the step for determining (col. 10, lines 1-10).

LaRue does not explicitly teach step for determining whether or not the one or more message clients are missing any of the plurality of notifications based on whether or not the one or more message clients can provide back each of the plurality of tokens identifying each of the plurality of changes. However, Folger teaches, "if any of this information does not agree with the information which the mobile computer or the communicator has stored in local memory, the communicator 140 can issue the command to establish communication with the base station 10 and to retrieve the

missed information, update, etc" (col. 12, lines 7-12). This teaches the claimed

determined the client missing changes in the update. Therefore, it would have been

obvious to one ordinary skill in the art at the time of the invention was made to combine

Folger and LaRue because determining the missing updated information would allow

the system to retrieve and update the information.

Regarding on claim 20, LaRue teaches the unreliable communication channel

comprises a wireless communication channel (wireless channel) (col. 5, lines 1-5).

Regarding on claim 21, LaRue teaches a step for providing a collection object to

the one or more message clients, the collection object representing a state of the data

stored at the one or more message clients (col. 5, lines 1-10).

Regarding on claim 22, LaRue teaches the step for providing any change

associated with a missing notification further comprises a step for providing any token

associated with a missing notification (col. 13, lines 29-37).

Regarding on claim 23, LaRue teaches an act of compressing the plurality tokens

to produce tokens that are unique to each of the one or more message clients (col. 10,

lines 1-8).

Regarding on claim 24, LaRue teaches the data stored at the message server includes at least one of contact data, calendar data, task data, and email data and wherein the one or more message clients comprise one of a portable personal computer, a cellular telephone, a pager, and a personal digital assistant (col. 7, lines 55-65).

Regarding on claim 25, LaRue teaches at least one change made in the message server data is divided into a first portion and a second portion, and at least one notification corresponds to the first portion, the method further comprising a step for providing the second portion to the one or more message clients in response to receiving a token associated with the first portion (col. 13, lines 29-37).

Conclusion

4.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Baoquoc N. To whose telephone number is (703) 305-1949 or via e-mail BaoquocN.To@uspto.gov. The examiner can normally be reached on Monday-Friday: 8:00 AM – 4:30 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Y. Vu can be reached at (703) 305-4393.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.
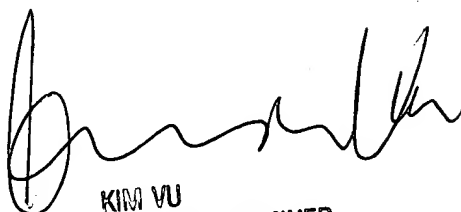
Any response to this action should be mailed to:

> Commissioner of Patents and Trademarks
> Washington, D.C. 20231.

The fax numbers for the organization where this application or proceeding is assigned are as follow:

- o   (703) 746-7238   [After Final Communication}]
- o   (703) 746-7239   [Official Communication]
- o   (703) 746-7240   [Non-Official Communication]

Hand-delivered responses should be brought to:

> Crystal Park II
> 2121 Crystal Drive
> Arlington, VA 22202
> Fourth Floor (Receptionist).

KIM VU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

Baoquoc N. To
April 2, 2003